In The Drawings

A set of Replacement Drawings is provided herewith.

## REMARKS

Claims 1-31 are pending. By the forgoing amendment, claims 1-3, 5-7, 9-13, 24, 27, 28 and 31 are amended. The amendment to claim 2 does not change the meaning of the claim which recites that the apertures in any of the 3 adjacent shims can have any of the recited shapes. Claims 64-74 have been added. Support for the added claims can be found at page 13, lines 3-21; page 14, lines 10-12; page 14, lines 13-16; page 6, lines 10-12 (claims 72-74); original claim 2 (claim 75, 78); original claim 14 (76); original claim 25 (77); page 14, lines 9-12 (79); page 15, lines 6-15 (80-84); page 15, lines 20-26 (85); and elsewhere in the specification. The added claims 64 and 72 are similar to pending claims 11 and 12.

Claim Objections

Claims 5-7 and 31 have been amended to correct the informalities. Applicants thank the examiner for her helpful suggestions.

Rejections under 35 U.S.C. §112, Second Paragraph

Claim 1 is now amended to recite "the" flow path in line 8. With regard to the phrase "such that a unit operation can be performed," applicants submit that a person skilled in the art would understand this phrase and would be able to view a device and readily recognize structural features that enabled the device to perform unit operations. The specification provides numerous examples of devices that are capable of conducting a unit operation on a fluid in a flow path. To cite some obvious examples, a device containing a flow path containing a catalyst or an adsorbent would be configured such that a unit operation can be performed on a fluid in the flow

path. With regard to "fluid" in lines 2, 12 and 14, the person skilled in the art can understand the claim in its current form – the claim is for making a device capable of conducting unit operations on a fluid – the claim does not require specific fluids. With regard to "device," the "device" in line 13 does mean the "device" mentioned in the preamble – the claim as written is clear and the skilled worker would understand the meaning of "device." With regard to "unit operation," of course the device made by the inventive method is intended to operate after bonding – again, the skilled worker would understand the claim to require the bonded device made by the method to be capable of performing a unit operation on a fluid in the flow path. Accordingly, withdrawal of the section 112, 2nd paragraph rejection of claim 1 is respectfully requested.

Claim 3 is amended to change "channel" to "flow path." As before, the skilled worker would understand that "a device" to mean the device formed by the process.

In claims 6 and 15, "any other flow paths" does not require antecedent basis since it does not refer to an earlier mention. A skilled worker can look a device and see a "flow path," so they would whether the flow path mixed with another flow path.

With regard to claim 8, 35 USC §112, 2nd paragraph only requires that a person of ordinary skill in the art be able to understand the meaning of a claim. Claim 8 is extremely clear – it claims a device that is made by the method of claim 1.

Claim 9 has been amended. Claim 9 requires a fluid, while claim 1 only requires that the device formed by the method be capable of processing a fluid. So, claim 9 cannot refer to a fluid in claim 1.

Regarding claim 10, applicants are claiming a method of A + B + C. This type of claim is not prohibited by 35 USC §112, 2nd paragraph. Thus, there is not a proper basis for rejecting a method of A + B + C.

In claim 10, lines 16-19 relate to parts B and C of the preamble. Lines 1-15 relate to part A of the preamble. The phrase "any other flow paths" is the first mention of "other flow paths" and is distinguished from "the flow path in said at least three shims." The claim is amended to change "a flow path" to "the flow path." As a person of ordinary would understand from the specfication, the "a plurality of shims" in line 4 may refer to the same "plurality of shims" in the preamble or may by a subset of the plurality of shims mentioned in the preamble. The "device" in line 14 is the same as in the preamble. In line 15, "a fluid" is not required, only that the device formed be capable of performing a unit operation on a fluid; in contrast, line 16 requires "a fluid." As the person of ordinary skill would understand, the unit operation in line 18 is the same or is a subset of the unit operation mentioned in the preamble.

Claim 11 has been amended to change "the borders" to "borders," change "a flow path" to "the flow path," and relate the border.

Claim 12 is amended similar to claim 11.

Regarding claim 13, the limitations in lines 3-12 are steps in the claimed method. Claim 13 has been amended to change "a flow path" to "the flow path." The other issues have been discussed above.

Claim 24 has been amended to change "a flow path" to "the flow path." The other issues have been discussed above.

With regard to claim 27, the claim is amended to clarify "a unit operation." The other issues have been discussed above.

Claims 28 and 31 have been amended to address the rejections.

Rejection as Anticipated by Schoenman et al.

Claims 1-4, 6-17, 21 and 24-30 have been rejected under 35 USC §102(b) as anticipated by Schoenman et al. U.S. Pat. No. 3,881,701.

This rejection is respectfully traversed. These claims all require either (1) conducting a unit operation in a flow path in at least three adjacent shims "wherein a straight, unobstructed line is present through the flow path in said at least three shims," (2) forming a device capable of performing a unit operation in a flow path in at least three adjacent shims, or (3) in claim 27 conducting a unit operation in a flow path in a plurality of shims where the flow path is parallel to shim thickness. These features are not found in Schoenman. In Schoenmen, the unit operation (chemical reaction) occurs outside the device or (heat transfer) on the surface plate. There is no unit operation occurring in the flow path in plates 16, 18, 20, 22 , 24 of Schoenman.

With regard to claim 7, Schoenman does not disclose a static mixer in the flow path.

With regard to claims 10, 24, and 27, it is improper to ignore claim limitations.

With regard to claims 11 and 12 (also the added claims 64-74), edge features are discussed on page 13 of applicants' specification and illustrated in Fig. 9. In contrast, Schoenman's aperture borders are smooth – there are no edge features.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejection as Anticipated by Bennett et al.

Claims 1-4, 6-17, 21 and 24-30 have been rejected under 35 USC §102(a) as anticipated by Bennett et al. U.S. Pat. No. 6,192,596.

This rejection is respectfully traversed. In Bennett, the unit operations occur perpendicular to shim thickness. See, for example, Fig. 4e of Bennett. This is the opposite of applicants' claimed invention. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection as Obvious Over Autenrieth In View Of Swift et al.

Claims 13-23 and 27-31 have been rejected under 35 USC §103(a) as obvious over Autenrieth U.S. Pat. No. 6,096,286 in view of Swift et al. U.S. Pat. No. 4,516,632.

This rejection is respectfully traversed. Autenrieth teaches a conventional shim design in which unit operations occur perpendicular to shim thickness. This is the opposite of applicants' claimed invention.

Furthermore, claims 13 and 28 require a flow path in which a unit operation occurs and in which a straight line can be drawn through the flow path in at least three shims. This feature is not present in Autenrieth.

The Swift design is incompatible with Autenrieth's design, and, in any event, is cited only to evidence the conventionality of bonding adjacent shims to create a gas tight connection (on page 21 of the Office Action).

Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

If the Examiner has any questions or would like to speak to Applicants' representative, the Examiner is encouraged to call Applicants' attorney at the number provided below.

Respectfully submitted,

Date: 9 Jan 2006

By: Frank Rosenberg

send correspondence to:
Frank Rosenberg
18 Echo Hill Lane
Moraga, CA 94556

Frank Rosenberg
Registration No. 37,068
tel: (925) 376-8416